



Patent  
2896-6

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	)	Examiner: N/A
	)	
John Arthur Cooper et al.	)	Group Art Unit: 1724
	)	
Serial No. 10/690,785	)	
	)	
Filed: October 21, 2003	)	
	)	
Title: Apparatus and Methods for	)	
Removing Mercury from Fluid	)	
Streams	)	
	)	

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents  
Post Office Box 1450  
Alexandria, Virginia 22313-1450

Sir:

Applicants hereby disclose to the Patent Office patents, publications, and other information of which they are aware. An Information Disclosure Statement by Applicant listing the items for consideration by the examiner is attached hereto. One copy of each patent and publication cited is being submitted with this Statement.

The items cited on the attached Information Disclosure Statement by Applicant may or may not be material to the patentability of the claims in the above-identified application, and their submission is not to be construed as an admission that the items are material or considered to be material (37 C.F.R. § 1.97(h)), or even that they qualify as "prior art" under

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Dated: January 22, 2003

By:

Cheryl J. Blackman

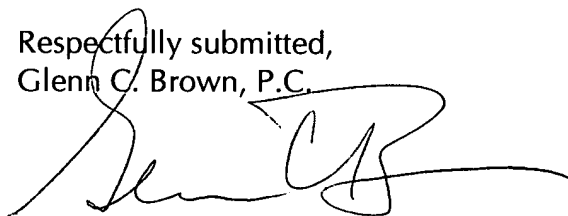
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Respectfully submitted,  
Glenn C. Brown, P.C.


A handwritten signature in black ink, appearing to be 'Glenn C. Brown', with a large, stylized initial 'CB' to the right.

Glenn C. Brown  
Registration No. 34,555

Dated: April 22, 2004

GCB/cjb  
Enclosures

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Sheet 1 of 3

## **Complete if Known**

Application Number	10/690,785
Filing Date	October 21, 2003
First Named Inventor	John Arthur Cooper et al.
Group Art Unit	1724
Examiner Name	N/A
Attorney Docket Number	2896-6

## **U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
		US 3,194,629		Dreibelbis et al.	07/13/1965	
		US 3,447,359		S.F. Kapff	06/03/1969	
		US 3,791,196		Lepper, Jr.	02/12/1974	
		US 3,842,678		De Baun et al.	10/22/1974	
		US 3,849,537		Allgulin et al.	11/19/1974	
		US 3,888,109		Sharki et al.	06/10/1975	
		US 3,892,549		Lyshkow	07/01/1975	
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		US 4,419,107		Roydhouse	12/06/1983	
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		US 4,500,327		Nishino et al.	02/19/1985	
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		US 4,679,628		Luetzelschwab	07/14/1987	
		US 4,826,775		Burns et al.	05/02/1989	
		US 4,903,492		King	02/27/1990	
		US 4,917,862		Kraw et al.	04/17/1990	

## **FOREIGN PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sub>6</sub>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
			JP 49-43197	A	Osaka Soda Co., Ltd.	11/19/1974		
			JP 50-6438	A	Osaka Soda Co., Ltd.	03/13/1975		
			GB 2122916	A	Nishino et al.	01/25/1984		
			EP 0289809	A1	Vogg et al.	11/09/1988		

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Application Number	10/690,785
Filing Date	October 21, 2003
First Named Inventor	John Arthur Cooper et al.
Art Unit	1754
Examiner Name	N/A
Attorney Docket Number	2896-6

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Examiner Name	N/A
Attorney Docket Number	2896-6

### OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		J.A. COOPER ET AL., "Modification of TRC's Hazardous Element Sampling Train for Mercury Speciation in Utility Flue Gas," TRC Environmental Corp., Tigard, Oregon, Electric Power Research Institute, Palo Alto, California, pp. 1-16	
		H.GUTBERLET ET AL., "Behaviour of the Trace Element Mercury in Bituminous Coal Furnaces with Flue Gas Cleaning Plants," Media-Data of VGB Kraftwerkstechnik, June 4, 1991	
		BURN HALL ET AL., "Mercury Chemistry in Simulated Flue Gases Related to Waste Incineration Conditions," Environ. Sci. Technol., Vol. 24, No. 1, 1990, pp. 108-111	
		NINA BERGAN FRENCH, ET AL., "State-of-the-Art Mercury CEMs for Hazardous & Mixed Waste Incineration Applications," Environmental Science & Technology and Analytical Chemistry, Feb. 16, 1999, pp. 1-10	
		JOSEPH J. HELBLE, ET AL., "Control of Mercury Emissions from Coal-Fired Power Plants," National Center for Environmental Research, U.S. Environmental Protection Agency, Oct. 31, 2000, <a href="http://es.epa.gov/ncercq-abstracts/grants/99/enveng/helble.html">http://es.epa.gov/ncercq-abstracts/grants/99/enveng/helble.html</a>	
		S.E. LINDBERG, ET AL., "Atmospheric Mercury Speciation: Concentrations and Behavior of Reactive Gaseous Mercury in Ambient Air," Environ. Sci. Technol., Vol. 32, No. 1, 1998, pp. 49-57	
		PATRICIO E. TRUJILLO, ET AL., "Development of a Multistage Air Sampler for Mercury," Analytical Chemistry, Vol. 47, No. 9, August 1975, pp. 1629-1634	
		YOSHIMI MATSUMURA, "Adsorption of Mercury Vapor on the Surface of Activated Carbons Modified by Oxidation or Iodization," Atmospheric Environment, Vol. 8, pp. 1321-1327	
		JOHN A. COOPER, "Recent advances in sampling and analysis of coal-fired power plant emissions for air toxic compounds," Fuel Processing Technology, Vol. 39, 1994, pp. 251-258	
		S.V. KRISHNAN, ET AL., "Sorption of Elemental Mercury by Activated Carbons," Environ. Sci. Technol., 1994, 28, pp. 1506-1512	
		BABU R. NOTT, ET AL., "Evaluation and Comparison of Methods for Mercury Measurement in Utility Stack Gas," Elec. Power Res. Inst, Palo Alto, CA, U.S. Environ. Prot. Agen., Research Triangle Park, NC, Radian Corp., Austin, TX, Deeco, Inc., Cary, NC, Frontier Geosciences, Seattle, WA, Mass. Inst. Of Technol., Cambridge, MA, Chester Environ., Tigard OR, pp. 1-15	

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